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APPLICATION NO. FILING DATE		ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/646,776 08/25/2003		08/25/2003	Satoshi Honda	0505-1236P	1097	
2292	7590	06/05/2006		EXAMINER		
Direction		KOLASCH & BIF	PARRIES, DRU M			
PO BOX 74	-	'A 22040-0747	ART UNIT	PAPER NUMBER		
TABLE CHORCH, VII 22010 0. V.				2836		
				DATE MAILED: 06/05/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

EX

				E				
		Application No.	Applicant(s)					
•	0.00	10/646,776	HONDA, SATOSHI					
	Office Action Summary	Examiner	Art Unit					
		Dru M. Parries	2836					
Period for	- The MAÎLING DATE of this communication a r Reply	ppears on the cover sheet wi	th the correspondence addres	'S				
WHIC - Extens after S - If NO - Failure Any re	DRTENED STATUTORY PERIOD FOR REP HEVER IS LONGER, FROM THE MAILING sions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory perioe to reply within the set or extended period for reply will, by state the ply received by the Office later than three months after the maid patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNIC 1.136(a). In no event, however, may a re of will apply and will expire SIX (6) MON ute, cause the application to become AB.	CATION. Peply be timely filed THS from the mailing date of this communication ANDONED (35 U.S.C. § 133).	·				
Status								
1) 又	Responsive to communication(s) filed on 13	April 2006.						
•		nis action is non-final.						
3)□	Since this application is in condition for allow		ers, prosecution as to the me	rits is				
•	closed in accordance with the practice under	•	·					
Disposition	on of Claims							
4) 🖂	☑ Claim(s) <u>1-20</u> is/are pending in the application.							
4	a) Of the above claim(s) is/are withdo	rawn from consideration.						
5)	Claim(s) is/are allowed.							
6)⊠	Claim(s) <u>1-7 and 11-17</u> is/are rejected.							
7) 🖂	Claim(s) 8-10 and 18-20 is/are objected to.							
8)	Claim(s) are subject to restriction and	l/or election requirement.						
Application	on Papers							
9) 🗌 7	The specification is objected to by the Exami	ner.						
10)⊠ 7	Γhe drawing(s) filed on <u>25 August 2003</u> is/are	e: a)⊠ accepted or b)⊡ ob	jected to by the Examiner.					
	Applicant may not request that any objection to the	ne drawing(s) be held in abeyan	ce. See 37 CFR 1.85(a).					
	Replacement drawing sheet(s) including the corre	ection is required if the drawing(s) is objected to. See 37 CFR 1.	.121(d).				
11) 🔲 🗆	Γhe oath or declaration is objected to by the	Examiner. Note the attached	Office Action or form PTO-1	52.				
Priority u	nder 35 U.S.C. § 119							
	Acknowledgment is made of a claim for foreion ☑ All b)☐ Some * c)☐ None of:	gn priority under 35 U.S.C. §	119(a)-(d) or (f).					
	1. Certified copies of the priority docume	nts have been received.						
	2. Certified copies of the priority docume	ents have been received in A	pplication No					
	3. Copies of the certified copies of the pr	iority documents have been	received in this National Stag	ge .				
	application from the International Bure	eau (PCT Rule 17.2(a)).						
* S	ee the attached detailed Office action for a li	st of the certified copies not	received.					
			,					
Attachment		-	(DTC 112)					
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)		lummary (PTO-413) s)/Mail Date					
	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/0		nformal Patent Application (PTO-152	<u>?</u>)				

Paper No(s)/Mail Date __

6) Other: ___

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DETAILED ACTION

Response to Arguments

- 1. Applicant's arguments, see pages 8 and 9, filed April 13, 2006, with respect to the rejection(s) of claim(s) 1 and 11 under 35 USC 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Gale et al. (6,674,180).
- 2. Applicant's arguments, see page 8, filed April 13, 2006, with respect to claims 8 and 18 have been fully considered and are persuasive. The 112 rejections of claims 8 and 18 have been withdrawn.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1, 4, 11, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Gale et al. (6,674,180). Gale teaches a vehicle power supply system for driving an electric motor (32) and other vehicle equipment (26, 28). He teaches an intermediate voltage application means for setting a line defined by an intermediate voltage (0V), between a drive voltage (42V) and a ground voltage (-42V), as a ground line for the other vehicle equipment (26). He also teaches power supply means for producing a voltage to be applied to said other vehicle equipment (26) (Col. 2, lines 19-23) based on the drive and intermediate voltage. He also teaches a node (N2) for providing the vehicle power supply.

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Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 2, 3, 5, 6, 7, 12, 13, 15, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale et al. (6,674,180) and Welches et al. (2003/0012038). Gale teaches a vehicle supply system as described above. Gale also teaches that the batteries (14 and 20) could be of varying voltages (i.e. 12V, 24V, 36V, etc.) (Col. 2, lines 8-11). Gale fails to teach the voltage being supplied to the other vehicle equipment being Pulse Width Modulated (PWM) or the use of an inverter. Welches teaches a DC-DC converter with an inverter to adjust the voltage applied to a load from a battery. He teaches the use of PWM to adjust the voltage being output to a load (Abstract and [0010]). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the method, used in Welches, in Gale's invention so that the voltage output to the other vehicle equipment is precise and for improved and efficient power generation.

Allowable Subject Matter

7. Claims 8-10 and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. No prior art of record teaches the limitations claimed in the above claims with motivation to combine them with the main reference.

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Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hwang (2002/0003525) teaches a power supply circuit for driving a load containing an oscillator, photo-coupler, FETs, diodes, capacitor and resistors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dru M. Parries whose telephone number is (571) 272-8542. The examiner can normally be reached on Monday -Thursday from 8:00am to 5:00pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus, can be reached on 571-272-2800 x 36. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMP

5-23-2006

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